

REMARKS

The Claims Are Patentable Over Prior Art

The Examiner has maintained the rejection under 35 USC 102 based on Yamamoto.

The Examiner asserts that the caul 39 in Yamamoto constitutes a “work surface” as used in the claims. The applicant respectfully disagrees. First of all, the caul 39 is formed from aluminum foil (col. 12, line 60), shown as thinner than the conductive bumps 34’ which are described at col. 12, line 49 as being 250-350 microns! A foil of this thickness is clearly not strong enough to support any materials, let alone serve as a work surface to support a material while adhesive is applied. Yamamoto’s caul 39 is a covering and that is all. It does not even support Yamamoto’s layers, it covers the top of those layers. With respect, there is not interpretation of “work surface” that would include a covering foil such as Yamamoto’s caul 39. It is not a question of the material that the caul is formed from – the lack of strength and stiffness of a microfoil such as caul 39 precludes this functionality entirely.

The Examiner asserts that the claims as currently written do not impart any functional, structural or physical properties that would distinguish the claimed adhesive anchors from the conductive bumps 34 of Yamamoto. Again, the applicant respectfully disagrees. The adhesive anchors are claimed as forming “a plurality of ***physical and chemical*** bonding sites,” which Yamamoto’s conductive bumps 34 do not. The Examiner indicates that the conductive bumps 34 are made from an adhesive material (col. 4, lines 49-63), but this does not impart to the conductive bumps 34 the functionality of forming chemical bonding sites. They have no adhesive properties. They are “made from a material having such hardness that permits penetration of the bumps through the synthetic resin sheet in a first pressing stage...and permits plastic deformation in a secondary pressing stage.” They are described as composed of a conductive composition *with a binder component* – there is absolutely nothing in Yamamoto that teaches or suggests that these conductive bumps 34 have any adhesive (chemical bonding) properties whatsoever. That is not their purpose. They serve to puncture the resin sheet, and thereafter to conduct electricity. That is all. With respect, the Examiner has attributed to Yamamoto’s conductive bumps 34 the functional, structural and physical property of forming a chemical binding site, with no support whatsoever for this in Yamamoto. In fact, neither does Yamamoto teach that the conductive

bumps 34 form *physical* bonding sites, which is also a claimed feature. From the fact that they are preferably composed of conductive metals such as copper (col. 5, lines 56-57) and serve the purpose of *puncturing* the resin layer, they cannot also be bonding sites. In short, the functional, structural and physical properties of the conductive bumps 34 ***preclude*** them from serving as the claimed “plurality of ***physical and chemical*** bonding sites.”

With respect, the Examiner has misconstrued Yamamoto. The Examiner has construed the binder used to form the conductive bumps 34 as giving the conductive bumps 34 the functionality of plurality of physical and chemical bonding sites, which they clearly do not have from Yamamoto’s description.

The Examiner references col. 7, lines 43 to 46 as supporting these functions. All this passage states is that “the conductive metal foil or the like [i.e. caul 39] is readily bonded to and integrated with the synthetic resin sheet as a result of a melt bonding or curing of the resin(s).” Again, the Examiner has misconstrued Yamamoto, who here merely teaches that the caul 39 (which the Examiner has characterized as the “work surface”) bonds to the resin layer 38. If anything, this actually *teaches away* from the conductive bumps 34 serving as physical or chemical bonding sites. The Examiner has mistaken the metal foil in this passage as the conductive bumps 34, where in fact it is the covering or caul layer 39.

The Examiner continues to assert that “after the synthetic sheet is laminated to the support, the sheet is then heated and cured and bonded to the conductive bumps.” With respect, there is no support for this whatsoever in Yamamoto. There is not a single reference in Yamamoto to the conductive bumps 34 having any bonding properties. Yamamoto does not use a “bonding adhesive” in the manner asserted by the Examiner, only to form his conductive bumps 34.

Finally, the Examiner asserts that the claims as currently written only require that the anchoring adhesive has a relatively higher degree of adhesion to the first or second material than to the bonding adhesive. This is incorrect. The claims as then written required that the anchoring adhesive has a relatively higher degree of adhesion to the first or second material than the bonding adhesive has to the first or second material. To clarify this, the applicant has amended claim 1 to recite “the anchoring adhesive having a relatively higher degree of adhesion to the first material or to the second material or to both than the degree of adhesion of the bonding

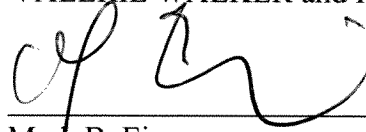
adhesive to the first material or to the second material or to both,” and has included this limitation in the body of the claim. The applicant has also amended claim 11 to recite the anchoring adhesive having a relatively higher degree of adhesion to the material than the degree of adhesion of the casting adhesive to the material” in the body of the claim. The applicant submits that this, too, overcomes the Examiner’s objection.

Favourable reconsideration and allowance of this application are therefore requested.

This response is accompanied by a Petition for a two month extension of time and a Request for Continued Examination. The Commissioner is authorized to charge any required fees to our Deposit Account No. 500663.

Executed at Toronto, Ontario, Canada, on April 9, 2009.

VALERIE WALKER and PAT CAIN



Mark B. Eisen
Registration No. 33,088
(416) 971-7202, Ext. 242
Customer Number: 38735

Att. Petition for Extension of Time
RCE